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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/580,062	02/12/2007	Michael Hopkinson	70347	3537

26748 7590 10/03/2008  
SYNGENTA CROP PROTECTION, INC.  
PATENT AND TRADEMARK DEPARTMENT  
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GREENSBORO, NC 27409

EXAMINER
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BROWN, COURTNEY A

ART UNIT	PAPER NUMBER
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1616

MAIL DATE	DELIVERY MODE
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10/03/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/580,062	<b>Applicant(s)</b> HOPKINSON ET AL.	
	<b>Examiner</b> COURTNEY BROWN	<b>Art Unit</b> 1616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____.                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>5/22/2006</u> .   | 6) <input type="checkbox"/> Other: ____.                          |

## **DETAILED ACTION**

Claims 1-12 are pending and are being examined for patentability.

### ***Priority***

Priority to US Provisional Application 60/527,555 filed on December 5, 2003 is acknowledged.

### ***Information Disclosure Statement***

The Information Disclosure Statements (IDS) submitted on May 22, 2006 has been considered by the examiner.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wichert et al. (US 6,890,889 B1) in view of Piper et al., (US 2005/0202972 A1) and further in view of Palgrave et al. (US 4,331,490).

### ***Applicant's Invention***

Applicant claims a pesticide concentrate comprising: a) 2-85% by weight water b) 5-90% by weight of at least one pesticide c) an amount of an ionic nitrate salt additive effective in reducing corrosion of metal surfaces d) optionally, other formulation auxiliaries wherein the ratio of component c) to component b) is less than or equal to 0.3:1.

### ***Determination of the scope and the content of the prior art (MPEP 2141.01)***

Wichert et al. teach herbicidal formulations comprising (A) mesotrione (2-[4-methylsulfonyl-2-nitrobenzoyl]-1, 3-cyclohexanedione). (B) about 0.3 to

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about 2.5 percent of crop oil concentrate or about 0.3 to about 2.5 percent of methylated seed oil, (C) about 0.5 to about 5% of a urea ammonium nitrate on a volume to volume basis based on the total of (A), (B), (C) and (D), and (D) a diluent (abstract, claim 1 and 6 of instant application). Wichert et al. teach the use of water as the diluent component (column 2, line 32, and claims 1, 9 and 10 of instant application). Wichert et al. teach applying the aforementioned formulation to the locus of desired vegetation (column 3, lines 14-18, claim 9 of instant application). Wichert et al. teach the use of an additional herbicide, Acetochlor, formulated with mesotrione in a premix (column 2, line 58, claim 11 of instant application). Additionally, Wichert et al. teach the use of buffers to control pH (column 2, lines 32-41, claim 2 of instant application).

***Ascertainment of the difference between the prior art and the claims  
(MPEP 2141.02)***

The difference between the invention of the instant application and that of Wichert et al. is that the instant invention requires the use of a metal chelate of mesotrione as opposed to mesotrione. For this reason, the teaching of Piper et al. is joined. Piper et al. teach a herbicidal composition comprising a metal chelate of a 2-(substituted benzoyl)-1, 3-cyclohexanedione and an organic phosphate, phosphonate or phosphinate adjuvant (abstract, claim 1, 3, and 7 of instant application). Wichert et al., in an example, teach the use of mesotrione copper salt (Table 2, claim 7 of instant application). Additionally, Wichert et al. teaches the use of urea ammonium nitrate ([0050], claims 1 and 6 of instant application).

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Another difference between the invention of the instant application and that of Wichert et al. is that the instant invention requires the use of a formulation that is a concentrate as opposed to being silent. For this reason, the teaching of Piper et al. is again joined. Piper et al. teach the use of a herbicidal composition that is a pre-mix concentrate and a suspension concentrate in a liquid carrier such as water ([0041] and [0043], claims 1 and 9 of instant application)

A final difference between the invention of the instant application and that of Wichert et al. is that the instant invention requires the optional use of a formulation auxiliary in the form of an alkali metal or alkaline earth metal chloride as opposed to being silent. For this reason, the teaching of Palgrave et al. is joined. Palgrave et al. teach the use of inorganic additives such as hexametaphosphate and sodium metavanadate in ammonium nitrate suspensions (column 3, lines 22-45, claims 1, 4, and 5 of instant application) that may be used in pesticide formulations (column 5, lines 17-21).

***Finding of prima facie obviousness***

***Rationale and Motivation (MPEP 2142-2143)***

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of the two cited references to arrive at a pesticide concentrate comprising water, a metal chelate of mesotrione, and an ionic nitrate salt additive effective in reducing corrosion of metal surfaces. One would have been motivated to make this combination in order to receive the expected benefit of having pesticide concentrate that can easily be stored and handled and is has improved

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selectivity due to the use of the chelate form of mesotrione as opposed to the unchelated form (Piper et al. [0005]). “It would be prima facie obvious to combine compositions each of which is taught by the prior art to be useful for the same purpose in order to form a resultant composition that is to be used for the very same purpose; the idea of combining them flows logically from their having been individually taught in prior art.” In re Kerkhoven, 205 USPQ 1069 (C.C.P.A. 1980).

In reference to claims 1 and 2, a composition that consists of the same components (i.e. water, a metal chelate of mesotrione and an ionic salt additive) will possess the same properties and therefore lead to identical, desired results. Products of identical chemical composition can not have mutually exclusive properties.” A chemical composition and its properties are inseparable. Therefore, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present. *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658(Fed. Cir. 1990).

### ***Conclusion***

None of the claims are allowed.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR

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Only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>.

Should you have questions on access to the Private PAIR system, contact the Electron Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Courtney Brown, whose telephone number is 571-270-3284. The examiner can normally be reached on Monday-Friday from 8 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, Johann Richter can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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